

What is claimed is:

1. A fuel system of a carburetor, comprising a single fuel passage leading from a constant-fuel chamber to a nozzle orifice opened into an intake channel, wherein a fuel adjusting part and a mixing chamber are provided in said fuel passage, said fuel adjusting part adjusts the effective surface area for passing the fuel with a metering needle executing linear reciprocal movement in response to the open-close operation of a throttle valve, bleed air and fuel that passed through said fuel adjusting part are introduced into said mixing chamber which has a volume sufficient to absorb and cause the relaxation of changes of the negative pressure acting on said nozzle orifice, a mixture of fuel and bleed air produced in said mixing chamber is discharged from said nozzle orifice into said intake channel.
2. The fuel system of a carburetor as described in Claim 1, wherein said intake channel has an almost uniform diameter along the entire length and said nozzle orifice is open into said intake channel downstream of said throttle valve.
3. The fuel system of a carburetor as described in Claim 1, wherein a fuel nozzle provided with a metering hole in a wall of a tube having a through hole linked to said constant-fuel chamber and a discharge flange is fitted and disposed in a retaining hole by positioning said discharge flange in almost the same plane with the side surface of said intake channel, said metering needle

extends in the direction crossing said intake channel inside therein, penetrates into said through hole and forms said fuel adjusting part together with said metering hole, said mixing chamber is provided around said tube, and said nozzle orifice is formed by a notch provided in the outer peripheral edge of said discharge flange.

4. The fuel system of a carburetor as described in Claim 1, wherein a fuel nozzle provided with a metering hole in a wall of a tube having a through hole linked to said constant-fuel chamber and a discharge flange is fitted and disposed in a retaining hole by positioning said discharge flange in almost the same plane with the surface of said intake channel, said metering needle extends in the direction crossing said intake channel inside therein, penetrates into said through hole and forms said fuel adjusting part together with said metering hole, said mixing chamber is provided around said tube, and said nozzle orifice is formed by a ring-like gap provided on the periphery of said discharge flange.

5. The fuel system of a carburetor as described in Claim 1, wherein a fuel nozzle provided with a metering hole in a wall of a tube having a through hole linked to said constant-fuel chamber is fitted and disposed in a retaining hole, said metering needle extends in the direction crossing said intake channel inside therein, penetrates into said through hole and forms said fuel adjusting part

together with said metering hole, said mixing chamber is provided around said tube, and said nozzle orifice is formed by a ring-like gap provided on the front end periphery of said tube.

5        6.        The fuel system of a carburetor as described in Claim 1, wherein a metering pipe provided with a metering hole in a wall of a tube having a through hole linked to said constant-fuel chamber is disposed in a body, said metering needle is disposed at a side of said intake channel, penetrates into said through hole, and forms said fuel adjusting part together with said metering  
10        hole, said mixing chamber is connected to said metering hole and is isolated from said intake channel by a discharge flange, and said nozzle orifice is formed by a small hole provided in said discharge flange.

15        7.        The fuel system of a carburetor as described in Claim 1, wherein a metering pipe provided with a metering hole in a wall of a tube having a through hole linked to said constant-fuel chamber is disposed in a body, said metering needle is disposed at a side of said intake channel, penetrates into said through hole, and forms said fuel adjusting part together with said metering  
20        hole, said mixing chamber is connected to said metering hole, and said nozzle orifice is formed by a front end opening of a tubular nozzle body protruding from said mixing chamber into said intake channel.

8. A fuel system of a carburetor, comprising  
a fuel nozzle including a tube and a discharge flange with an aperture forming  
a nozzle orifice opened into an intake channel,  
a fuel passage leading from a constant-fuel chamber to the nozzle orifice,  
5 a fuel adjusting part provided in the fuel passage, and  
a mixing chamber provided in the fuel passage to receive bleed air and fuel  
that passed through said fuel adjusting part.

9. The fuel system of Claim 8, wherein the intake channel has an almost  
10 uniform diameter along the entire length and the nozzle orifice is open into the  
intake channel downstream of a throttle valve.

10. The fuel system of claim 8, wherein the fuel adjusting part comprises a  
metering needle linearly and reciprocally movable in response to the open-  
15 close operation of a throttle valve.

11. The fuel system of claim 8, wherein the mixing chamber has a volume  
sufficient to absorb and cause the relaxation of changes of the negative  
pressure acting on said nozzle orifice.

12. The fuel system of claim 8, further comprising a bleed air passage coupled  
to the mixing chamber.

13. The fuel system of Claim 8, wherein the fuel nozzle comprises a metering  
hole in a wall of a tube having a through hole linked to the constant-fuel  
chamber and wherein the discharge flange is fitted and disposed in a retaining  
5 hole by positioning the discharge flange in almost the same plane with the  
surface of said intake channel, the metering needle extends across the intake  
channel and penetrates into the through hole and forms the fuel adjusting part  
together with the metering hole, the mixing chamber is provided around the  
tube.

10

14. The fuel system of Claim 8 wherein the aperture is a hole.

15. The fuel system of Claim 8 wherein the aperture comprises a plurality of  
holes.

15

16. The fuel system of Claim 8 wherein the aperture comprises a ring like gap.